## **Rec'd PCT/PTO-1** 7 MAR 2006

From the INTERNATIONAL SEARCHING AUTHORITY To: WRITTEN OPINION OF THE see form PCT/ISA/220 INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1) Date of mailing (day/month/year) see form PCT/ISA/210 (second sheet) Applicant's or agent's file reference FOR FURTHER ACTION see form PCT/ISA/220 See paragraph 2 below Priority date (day/month/year) International filing date (day/month/year) International application No. 20.06.2003 18.06.2004 PCT/US2004/019587 International Patent Classification (IPC) or both national classification and IPC B22F3/15, B22F3/12, B22F7/00 **Applicant** CRS HOLDINGS, INC. This opinion contains indications relating to the following items: 1. ☑ Box No. I Basis of the opinion Box No. II Priority Non-establishment of opinion with regard to novelty, inventive step and industrial applicability ☐ Box No. III ☐ Box No. IV Lack of unity of invention Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement ☐ Box No. VI Certain documents cited ☐ Box No. VII Certain defects in the international application Box No. VIII Certain observations on the international application **FURTHER ACTION** If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notifed the International Bureau under Rule 66.1b/s(b) that written opinions of this International Searching Authority will not be so considered. If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later. For further options, see Form PCT/ISA/220. For further details, see notes to Form PCT/ISA/220. **Authorized Officer** 

PATENT COOPERATION TREA

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### PATENT COOPERATION TREATY

# **PCT**

#### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 0008-CA323WO	FOR FURTHER ACTION	See item 4 below	
International application No. PCT/US2004/019587	International filing date (day/month/year) 18 June 2004 (18.06.2004)	Priority date (day/month/year) 20 June 2003 (20.06.2003)	
International Patent Classification (8th See relevant information in Form F	n edition unless older edition indicated) PCT/ISA/237		
Applicant CRS HOLDINGS, INC.			

1.	This international preliminary re International Searching Authorit	eport on patentability (Chapter ty under Rule 44 bis.1(a).	I) is issued by the International Bureau on behalf of the
2.	This REPORT consists of a total	l of 5 sheets, including this co	ver sheet.
	In the attached sheets, any refere to the international preliminary	ence to the written opinion of report on patentability (Chapte	the International Searching Authority should be read as a reference or I) instead.
3.	This report contains indications	relating to the following items	3:
	Box No. I	Basis of the report	
l	Box No. II	Priority	
	Box No. III	Non-establishment of opin applicability	ion with regard to novelty, inventive step and industrial
	Box No. IV	Lack of unity of invention	
	Box No. V		Article 35(2) with regard to novelty, inventive step or industrial explanations supporting such statement
	Box No. VI	Certain documents cited	
	Box No. VII	Certain defects in the inter	national application
	Box No. VIII	Certain observations on the	e international application
4.	The International Bureau will conot, except where the applicant date (Rule 44bis .2).	ommunicate this report to desi makes an express request unde	gnated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but er Article 23(2), before the expiration of 30 months from the priority
			Date of issuance of this report 03 January 2006 (03.01.2006)
	The International Bure 34, chemin des Col 1211 Geneva 20, Sv	ombettes	Authorized officer  Beate Giffo-Schmitt
Facsir	mile No. +41 22 740 14 35		Telephone No. +41 22 338 87 20

Form PCT/IB/373 (January 2004)

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US2004/019587

	Box N	o. I Basis of the opinion
1.	With re	gard to the <b>language</b> , this opinion has been established on the basis of the international application in guage in which it was field, unless otherwise indicated under this item.
	lai	is opinion has been established on the basis of a translation from the original language into the following nguage , which is the language of a translation furnished for the purposes of international search nder Rules 12.3 and 23.1(b)).
2.	With re	egard to any <b>nucleotide and/or amino acid sequence</b> disclosed in the international application and eary to the claimed invention, this opinion has been established on the basis of:
	a. type	of material:
		a sequence listing
		table(s) related to the sequence listing
	b. form	nat of material:
		in written format
		in computer readable form
	c. time	e of filing/furnishing:
		contained in the international application as filed.
		filed together with the international application in computer readable form.
		furnished subsequently to this Authority for the purposes of search.
3	h	n addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto as been filed or furnished, the required statements that the information in the subsequent or additional opies is identical to that in the application as filed or does not go beyond the application as filed, as ppropriate, were furnished.
4	. Addit	onal comments:

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US2004/019587

_	Box	No. II Priority			
١.	Ø	The following doc	ument has not b	een furnished	:
		□ copy of the	e earlier applica	tion whose pri	ority has been claimed (Rule 43bis.1 and 66.7(a)).
		□ translation	of the earlier a	pplication who	se priority has been claimed (Rule 43bis.1 and 66.7(b)).
		Consequently it h	as not been pos n established on	sible to conside	ler the validity of the priority claim. This opinion has on that the relevant date is the claimed priority date.
2.		This opinion has l has been found in filing date indicate	valid (Bules 43)	<i>bis</i> .1 and 64.1	ity had been claimed due to the fact that the priority claim ). Thus for the purposes of this opinion, the international he relevant date.
3.	Add	ditional observation	s, if necessary:		
-					
	Bo	x No. V Reason	ed statement u	under Rule 43 nd explanation	bis.1(a)(i) with regard to novelty, inventive step or ns supporting such statement
	inc	lustrial applicabili	ed statement ι ty; citations ar	under Rule 43 nd explanation	bis.1(a)(I) with regard to novelty, inventive step or ns supporting such statement
1.	inc	x No. V Reason lustrial applicabili atement	ed statement ι ty; citations ar	under Rule 43 nd explanation	bls.1(a)(I) with regard to novelty, inventive step or ns supporting such statement
1.	Sta	lustrial applicabili	ty; citations ar	es: Claims	ns supporting such statement
1.	Sta	lustrial applicabili atement	ty; citations ar	nd explanation	bls.1(a)(l) with regard to novelty, inventive step or ns supporting such statement  1,6
1.	Sta No	lustrial applicabili atement veity (N)	ty; citations ar Ye Ne	es: Claims	ns supporting such statement
1.	Sta No	lustrial applicabili atement	ity; citations ar Ye Ne Ye	es: Claims o: Claims	ns supporting such statement
1.	Sta No Inv	lustrial applicabili atement veity (N)	ty; citations ar Ye Ne Ye	es: Claims o: Claims es: Claims	1,6
1.	Sta No Inv	dustrial applicabilinatement velty (N) ventive step (IS)	ty; citations ar	es: Claims o: Claims o: Claims o: Claims	1,6 2-5, 7-10
	Sta No Inv	dustrial applicabilinatement velty (N) ventive step (IS)	ty; citations ar	es: Claims o: Claims o: Claims o: Claims o: Claims	1,6 2-5, 7-10
	Sta No Inv	dustrial applicability atement velty (N) ventive step (IS) dustrial applicability	ty; citations ar	es: Claims o: Claims o: Claims o: Claims o: Claims	1,6 2-5, 7-10
	Sta No Inv	dustrial applicability atement velty (N) ventive step (IS) dustrial applicability tations and explana	ty; citations ar	es: Claims o: Claims o: Claims o: Claims o: Claims	1,6 2-5, 7-10

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

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- 1. Claim 1 is unclear because the wording "a desired amount of porosity" does not specify which porosity is actually intended and can even comprise 100% dense, i.e. zero porosity materials (cf. page 6, line 5-7). The same objection applies to claim 6.
- 2. The unclear wording "a desired amount of porosity" has no limiting effect and cannot be used to distinguish the claimed invention from the prior art. Therefore the subject-matter of claim 1 lacks novelty in view of a conventional ROC process as disclosed for instance in D1 Fig. 6 or in D2 (abstract and col. 6 line 38-40).

The same objection applies also to the subject-matter of claim 6 (cf. D1, "Processing of bimetallic parts").

- 3. The dependent claims would not add anything rendering the claimed subjectmatter novel and inventive.
- 4. An amended claim 1 specifying that the process is directed to the production of tools for injection moulding having a porosity sufficient to vent air through the walls (cf. page 4, line 5-6) would meet the objections above while not adding subject-matter which was not originally disclosed.